5

- 9 -

WE CLAIM:

- 1. Apparatus for controlling color of an interference effect pigment during its preparation comprising:
 - an interference effect pigment reactor;
- a flow cell in communication with the reactor adapted to receive a sample of pigment from the reactor; and
- a goniospectrophotometer, interfaced with said flow cell, for evaluating light reflected from pigment in said flow cell.
- 2. Apparatus of claim 1, wherein said goniospectrophotometer is adapted to evaluate light reflected at up to 25° from the specular angle of the pigment.
- 3. Apparatus of claim 1, wherein said goniospectrophotometer is adapted to evaluate interference characteristics of light reflected from the pigment dispersion.
- 4. Apparatus of claim 1, wherein said flow cell is adapted to orient the pigment in said flow cell.
- 5. Apparatus of claim 1, wherein said flow cell provides a flow layer, for conducting the pigment dispersion therethrough, having a measurement transverse to a flow direction of the pigment dispersion ranging from .1 mm to 2 mm.

- 10 -

- 6. Apparatus of claim 5, wherein the measurement ranges from 0.5 mm to 1 mm.
- 7. Method for controlling color of an interference effect pigment during its preparation comprising providing a flow cell with a sample of the pigment being formed, impinging light on the sample, and comparing a characteristic of light reflected from the pigment with a standard.
- 8. Method of claim 7, wherein the characteristic is a characteristic of an interference effect of light reflected from the pigment.
- 9. Method of claim 7, wherein said comparing a characteristic of light comprises comparing wavelength, dominant wavelength, color space parameters or a combination thereof.
- 10. Method of claim 7, wherein said sample comprises mica coated with a high refractive index material.
- 11. Method of claim 7, further comprising terminating the processing when the characteristic corresponds with the standard.